Report (1966–1970) of the Subcommittee on the Taxonomy of the Actinomycetes to the International Committee on Nomenclature of Bacteria

14 August 1970

Mexico City, Mexico

The various meetings and activities of the Subcommittee on Taxonomy of the Actinomycetes during the IX International Congress for Microbiology held at Moscow in 1966 have already been reported (*Int. J. Syst. Bacteriol.* 17:139–144, 145–156, and 157–163; *J. Soc. Actinomyc. Japan*, no. 10, May 1967). The Subcommittee organized an International Symposium on the Taxonomy of the Actinomycetales at Jena, Germany, in September 1968. A great number of scientific papers on various aspects of the taxonomy of actinomycetes were presented. They are now published in *The Actinomycetales*, H. Prauser (ed.), Jena (Fischer), 1970. The subcommittee met on this occasion and discussed in particular the examination of characters other than those used in the International Streptomyces Project (ISP) for the description of species of *Streptomyces*, e.g., cell-wall composition, antagonistic properties, etc.

The Subcommittee's cooperation with the ISP, which started in 1964, was successfully continued. The descriptions of 300 species of *Streptomyces*, examined in a uniform way, have already been published (*Int. J. Syst. Bacteriol.* 18:69–189 and 279–392; 19:319–512). The examination of another 150 species is under way. The results are expected to be published within one year. The type strains of these 300 species have been deposited with the type-culture collections at: CBS, Baarn; USSR Res. Inst. f. Antibiotics, Moscow; Inst. Fermentation, Osaka, Japan; and ATCC, Rockville, Md., USA. They are available for distribution to investigators throughout the world. The methods of ISP have been widely and successfully applied to the identification of streptomycetes when all other kinds of description had failed. The results of ISP are also being used for other studies such as numerical taxonomy and phage studies.

The Subcommittee has cooperated with the Advisory Committee on *Actinomycetales* for the 8th edition of *Bergey's Manual*. At the Jena meeting, the families and genera to be included in the order *Actinomycetales* were considered. The individuals to be responsible for the various

manuscripts were chosen and proposed. Many members of the Subcommittee took responsibility for describing various taxa for *Bergey's Manual*. All but one of the manuscripts of the order *Actinomycetales* have already been submitted to the editors of *Bergey's Manual*.

The Subcommittee met twice at the Xth International Congress for Microbiology in Mexico City on 10 and 11 August 1970. Members present were: G. A. DeVries, D. Gottlieb, E. Küster, R. Locci, Y. Okami, T. P. Preobrashenskaja, T. G. Pridham, A. Sanchez Marroquin, J. M. Slack, and S. A. Waksman. Apart from the delivery of the various reports (Chairman, Secretary, Subgroups' Chairmen), the following items were considered and discussed.

(1) With regard to the new concept envisaged for the ICNB, there was a consensus among the Subcommittee members present that subcommittees have broad responsibilities and that the various taxa under their purview not be split with the resultant formation of new subcommittees. The Actinomycetes Subcommittee has working groups actively studying the special problems of particular groups of organisms.

(2) Subspecific taxa are useful in ordering and identifying members of the *Actinomycetales*, but there is no need for their official recognition in the Code.

(3) The use of official abbreviations for the generic names as proposed by T. Cross was discussed. The majority of the members present did not see merit in such a proposal for the organisms in the order *Actinomycetales*.

(4) Election of officers and nomination of new members. D. Gottlieb was reelected as Chairman. R. Locci was elected as Secretary. A nonofficial post of associated chairman was created, to which E. Küster was elected, in order to aid in the Subcommittee's work.

The following new members were elected to the subcommittee: T. Arai, S. G. Bradley, T. Cross, W. Kurylowicz, E. B. Shirling, Z. Tešić, and S. T. Williams. The membership consists of international, active workers on the taxa of the order *Actinomycetales*. The Subgroup on *No-*

cardia is being reorganized first to promote more intensive and extensive studies on this genus and secondly to encourage greater international cooperation among all those working on *Nocardia*.

Two round-table conferences were held in which papers were presented on various aspects of actinomycete taxonomy. The subjects included genetics (Johanides), species concepts (Pridham), nomenclature (Pridham), micro-morphology (Kurylowicz, Locci), and keys for identification (Küster).

The present members and officers of the subcommittee are: D. Gottlieb, (*Chairman*), Urbana, Illinois, USA; R. Locci, (*Secretary*), Milan, Italy; T. Arai, Chiba, Japan; E. Baldacci, Milan, Italy; S. G. Bradley, Richmond, Virginia,

USA; T. Cross, Bradford, England; G. A. DeVries, Baarn, Netherlands; L. V. Kalakoutskii, Moscow, USSR; N. A. Krasil'nikov, Moscow, USSR; D. R. Kurylowicz, Warsaw, Poland; E. Küster, Giessen, Germany; Y. Okami, Tokyo, Japan; H. Prauser, Jena/Thür., Germany; T. P. Preobrashenskaja, Moscow, USSR; T. G. Pridham, Peoria, Illinois, USA; E. B. Shirling, Delaware, Ohio, USA; J. M. Slack, Morgantown, West Virginia, USA; Z. Tešić, Beograd-Zemun, Yugoslavia; S. A. Waksman, New Brunswick, New Jersey, USA; and S. T. Williams, Liverpool, England.

E. Küster, Retiring Secretary
R. Locci, Secretary

Report (1968–1970) of the Subgroup on Microaerophilic Actinomycetes to the International Subcommittee on the Taxonomy of the Actinomycetes

10 August 1970

Mexico City, Mexico

The Subgroup on the Taxonomy of Microaerophilic Actinomycetes has been quite productive since the time of its last report (Jena, 1968).

Work has continued on the characterization of type or neotype strains within the genus *Actinomyces*. This has included studies on cell and colony morphology, physiology, end products from glucose, cell-wall composition, serology, and pathogenicity. Most of this work has been completed on the following strains: *Actinomyces bovis* ATCC 13683, *Actinomyces odontolyticus* ATCC 17929 (= NCTC 9935), *Actinomyces israelii* ATCC 12102, *Actinomyces naeslundii* ATCC 12104, *Actinomyces viscosus* ATCC 15987, *Arachnia propionica* ATCC 14157, *Bacterionema matruchotii* ATCC 14266 (= NCTC 10254), *Rothia dentocariosa* ATCC 17931.

During the past year, our efforts have been directed towards the preparation of a manuscript on the family *Actinomycetaceae* for the 8th edition of *Bergey's Manual*. This work has been completed, and the manuscript is now under review by the editorial board of *Bergey's Manual*. A copy of this manuscript has been forwarded to Küster, secretary for the Subcommittee. The authors of the submitted manuscripts are as follows: Family *Actinomycetaceae*, J. M. Slack; Genus I *Actinomyces*, J. M. Slack; Genus II *Arachnia*, L. Pine and L. K. Georg; Genus III *Bifidobacterium*, M. Rogosa; Genus IV *Bacterionema*, M. N. Gilmour; Genus V *Rothia*, L. K. Georg.

J. M. Slack
Chairman